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Sharing responsibility in disaster management policy

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ABSTRACT

The Sendai Framework for Disaster Risk Reduction delivers internationally agreed upon norms for disaster risk reduction, engendered in part through shared-responsibility, and subsequently adopted by Australia. However, it has been contended that shared-responsibility in Australia is a partially articulated social contract. Through targeted engagement with the works of Foucault, a combination of document analysis on selected disaster risk reduction policies and employing a taxonomy of obligations of shared-responsibility, we investigate if shared-responsibility signifies the failure of dominant disaster management discourses to articulate concrete responsibilities. We identify that an incomplete normalisation process is in part responsible for partial articulation.

1. Introduction

The Sendai Framework For Disaster Risk Reduction (SFDRR) exhorts shared-responsibility as a guiding principle in delivering its four priorities for action: (1) understanding disaster risk; (2) strengthening disaster risk governance to manage disaster risk; (3) investing in disaster risk reduction for resilience; and (4) enhancing disaster preparedness for effective response, and to 'Build Back Better' in recovery, rehabilitation and reconstruction [1]. Shared-responsibility in Australia was identified as early as 2011 as an important element in enhancing disaster resilient communities in Australia [2]. Justification for focusing on terminology such as resilience rests on the terms ubiquity across several disciplines, including resource management [3], socio-ecological-systems [4,5] and engineering [6]. Justification for shared-responsibility is its prominence in disaster management literature.

Since the release of the Australian National Strategy for Disaster Resilience (NSDR) in 2011, there has been an attempt at coordinating how Australia prepares for, and responds to, disasters. As each state in Australia is constitutionally responsible for preparing for and responding to disasters, this is no simple task. The release of the National Framework for Disaster Resilience (NFDRR) in 2018 is a fulfilment of Australia's commitment in implementing the SFDRR. This policy serves as the most current document which identifies the reduction of disaster risks and the necessity of building community resilience in mitigating the risks posed by disasters in contemporary Australia. Central to these documents is the mantra that by 'sharing responsibility', there is a greater chance of enhancing the resilience of Australian communities. Each state and territory in Australia is then required to implement their own frameworks and strategies for building resilience and reducing disaster risks.

Shared-responsibility implies that each segment of society has obligations in disaster management. For this to be possible, governments and their agencies need to clearly articulate what is expected when prescribing them and their implications. Lukasiewicz, Dovers and Eburn (2017) contend that as natural disasters stretch the limits of emergency services and national governments, shared-responsibility becomes the vehicle by which all actors contribute to disaster resilience. These authors employed a literature review and document analysis of the NSDR and associated policy documents to 'clarify, organise and operationalise the necessarily general policy goal of shared responsibility' in an Australian context. Their analysis brings to the fore the central role governments play in disaster management in Australia. Importantly, their work uncovers the lack of emphasis placed on highlighting community empowerment in a shared responsibility paradigm. Understandably, this is not the first instance where issues surrounding the application of shared-responsibility have been bought to light in an Australian context. In McLennan and Handmer's (2014) report, 'Sharing Responsibility in Australian Disaster Management - Final Report for the Sharing Responsibility Project', the authors contend that shared-responsibility in Australia is a partially articulated social contract. The reason for this claim is that shared-responsibility is a metaphor for a renegotiation of roles and responsibilities in disaster management in Australia. However, McLennan and Handmer argue that the benefits and rights which citizens would receive under this new paradigm, are missing.

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This would suggest a problem with the articulation of the goals, rules, and roles, of shared-responsibility. We contend that this partial articulation could be the result of an incomplete process of normalisation in Australian disaster management policy. This claim is given further weight when combined with Lukasiewicz et al.'s (2017) recognition of a lack of emphasis placed on community empowerment within Australian disaster management arrangements.

The French historian and philosopher, Michel Foucault, posited that normalisation can be viewed as a method which simultaneously homogenises and individualises subjects through ordering, observation, exclusion, control, and intervention [7,8]. Applying this explanation to Australian disaster management discourses, normalisation can be observed as the homogenisation and articulation of rules, norms, objectives, and goals in disaster management. Consequently, shared-responsibility becomes essential as it links the security and well-being of both individual and collective life [9]. This is achieved principally, through the assignment of different roles and responsibilities, for different segments of Australian society. The normalisation of rules, norms, objective, and goals is an important element in the creation of a biopolitical regime [7]. For shared-responsibility to contribute to enhancing the security and well-being of individual, and collective life in Australia, clear rules, definitions, goals, and objectives are required. The absence of a complete normalisation process results not only in a partially articulated social contract (McLennan and Handmer 2014), but also a disempowered community [11] that is not properly prepared when a disaster occurs.

This paper will assert that shared-responsibility in Australia is a partially articulated social contract as a result of an incomplete process of normalisation. Furthermore, the paper will explore if this process devolves from international to national polices in the context of the Australian disaster resilience policy landscape. In doing so, this paper will use the SFDRR, the NFDRR and the recently released Tasmanian Disaster Resilience Strategy (TDRS). Using these policies, this paper will explore if the normalisation of shared-responsibility, observed by its devolution from the international through to local levels, reinforces McLennan and Handmer's (2014) claim that it is only a partially articulated concept in the Australian disaster policy landscape.

The paper is structured as follows. The ensuing section will unpack the concepts of normalisation, biopolitics and shared-responsibility. The methodology section will explain how the policies were analysed. The next section will offer the findings framed on a taxonomy of obligations developed by Lukasiewicz et al. (2017). The discussion section will then examine the mismatch of expected disaster obligations and responsibilities existing between governments and citizens in Australia. Finally, the paper will provide the limitations of this research and conclude with avenues for future research.

2. Literature review

The first section will depict the concepts of normalisation, biopower and biopolitics as articulated by Foucault. The second section will describe the literature on shared responsibility in the context of disaster risk reduction.

2.1. Normalisation

Normalisation can be viewed as a method which simultaneously homogenises and individualises subjects through ordering, observation, exclusion, control, and intervention [7,8]. It is identified in many different social practices including medical, disciplinary, and educative, among others. The main aim of normalisation is to set a standard as to what determines normality, and conversely, what is then abnormal in society [12]. This is because the norm introduces, ‘a useful imperative and as a result of measurement, all the shading of individual differences’ [13].

The goal of normalisation is to create subjects which are highly proficient at undertaking a narrowly defined range of practices [14]. In disaster management, normalisation is the homogenisation of the rules, standard practices, and goals of disaster risk reduction that they can be broadly applied across society. Individuals and communities are then measured by quantifying differences, those who do not conform are then used as a level by which the normal, or conforming, are assessed. In shared-responsibility discourses, it is the resilient versus the non-resilient, which normalisation delineates.

To be effective, normalisation is legitimised through the use of experts. These experts define not only the objects of their studies, but they also determine the limits of them [15]. In the context of disaster management in Australia, these experts are evidenced by consultation with the Commonwealth Scientific and Industrial Research Organisation as well as heads of state emergency services, universities, and other academic institutions. It is through this legitimisation that normalisation becomes an apparatus supporting a biopolitical regime. Therefore, once a norm has legitimised rules, practices, guidelines, or expectations as set out by experts in any given field, it can then target populations. As such, ‘the norm is something that can be applied both to a body one wishes to discipline, and a population one wishes to regularize’ [16].

The disciplining of a body before the regularisation of a population is where normalisation and biopower converge. Normalisation, in effect, acts like a parasite. It invests in both the successes of the sovereign power, as well as that of the law, but without eliminating either [7]. Foucault calls this act a systematic normalisation of the law. What it achieves, is that judgements and measures about what is considered normal and abnormal, rather than absolute rights and wrongs, are given precedent in any given population. Once this has occurred in a biopolitical regime, neither the sovereign nor the law, escapes the process of normalisation [7].

2.2. Biopower and biopolitics

Like many of Foucault's theories, biopower is meant to be applied freely, it is merely a tool to be utilised by an author [17]. Foucault also did not maintain a rigorous separation between biopower and biopolitics and used both terms interchangeably [18]. The literature on Foucault's theories on biopower is vast, and a thorough examination of all facets of his works is neither possible nor desirable in this paper. Consequently, this paper will focus on how normalisation supports a biopolitical regime centred on the control and regulation of populations, specifically in the context of shared-responsibility in Australian disaster management discourses.

In the first volume of *A History of Sexuality*, Foucault highlights the importance of normalisation as a technology of biopower. He posits that a ‘normalizing society is the historical outcome of a technology of power centred on life’ [19]. Mills (2013) highlights Foucault's assertion that instead of norms being produced through prior acts, ‘the normal comes first, and the norm is deduced from it’ [12]. Therefore, in biopolitics, it is the norm that is deduced a posteriori, or only realised after the fact and then applied to a population.

Once an interplay is established between different distributions of normality, the unfavourable, or abnormal, is brought into line with what is considered favourable, or normal. This allows for the biopolitical control of populations to follow. As Cavanagh (2018), extending on Goldman's (2001) research [20] explains, biopolitics is ‘a means of shaping the values and subjectivities of various human populations’ [21]. Consequently, biopower signals a form of power that promotes the security and well-being of individual and collective life [9]. In this case, community safety is framed as a joint venture, a shared-responsibility. It produces knowledge of the methods, ‘that sustain or inhibit various life processes’ [9]. In short, the process of normalisation establishes rules, regulations, specifications, goals, and processes, by which the control of a population or subject is then possible. In disaster management this is achieved through the concept of shared-responsibility being applied nation-wide. Consequently, biopolitics can be seen as the application of a normalisation process on a broad population. In order for it to be successfully applied, the normalisation process must be complete, otherwise a partial articulation occurs in which norms, rules, roles, and responsibilities are still contested, or poorly understood by those charged with its implementation.

2.3. Shared-responsibility

Shared-responsibility in Australia is traced back to works by McLennan and Handmer (2014) and the 2009 Victorian Bushfires Royal Commission, developed in the post Black Saturday milieu. Marking the reorientation of disaster management in Australia, the shared-responsibility paradigm advocated different responsibilities for different segments of the nation, even if they were not equal responsibilities for all [22]. This reorientation was solidified in Australia with the 2011 release of the National Strategy for Disaster Resilience. This policy was considered the first step in a long term reorganisation of disaster management in Australia and cemented the concept of shared-responsibility as a vital element in creating disaster resilient communities [2]. This change moved the focus away from the response and recovery phases of the disaster management cycle to the prevention/mitigation and preparation phases. This change built upon the earlier Victorian Bushfires Royal Commission conceptualisation of shared-responsibility by exhorting communities, individuals, and households to take a greater share of responsibility. This included the requirement to act on information provided before, during, and after disasters, among other responsibilities, as it was deemed that this could not be solely the domain of agencies responsible for disaster management [2]. The normalisation of a new paradigm in Australian disaster management begins with this reorientation. The policy window opened by the Black Saturday Bushfires in Victoria facilitated a change in policy direction that required new norms and rules, practices, and systems. If normalisation is the homogenisation of practices, rules, and norms so that individuals a can undertake simple, narrowly defined tasks, this change emphasised a new way in which individuals are expected to plan for, and respond to, disasters.

Some of the vagueness surrounding shared-responsibility has been attributed to differences in assigning and formalising responsibilities in Australian legal and governance structures [23]. Blythe, McLennan and Eburn (2015) identify that whilst the legal system in Australia is powerful in holding parties responsible and enforcing sanctions and fines when legal obligations are not met, governance systems 'provide the structures and processes through which parties attempt to influence, negotiate and contest where responsibility lies, and ultimately make collective decisions about how it is shared' [10]. It is here that a normalisation process can be seen. Normalisation acknowledges that debate and value trade-offs will occur over how responsibility will be shared between governments and citizens. This is an important step if new norms are to be legitimised and accepted by society.

Legitimacy is established by the size and scope by those responsible for the creation of governance documents. This is evident in the collective international contribution to the SFDRR that included the attendance of 6500 participants, 25 heads of state, 42 inter-governmental organisations, 236 non-government organisations, over 300 private sector representatives, and 280 local governments [24].

Attendance and contributions are also well represented at the national level in Australia with the NFDRR. However, the concepts of shared-responsibility and resilience are defined in the SFDRR and then adopted in the NFDRR and the TDRS without further elaboration. This highlights the adoption of a partly articulated conception of shared-responsibility. As such there are minimal inconsistencies as to how shared-responsibility is ambiguously framed, as can be seen below,

"While States have the overall responsibility for reducing disaster risk, it is a shared responsibility between Governments and relevant stakeholders." [24]

"Disaster resilience and risk reduction is a shared responsibility, but often not equally shared. While individuals and communities have their roles to play, they do not control many of the levers needed to reduce some disaster risks. Governments and industry in particular must take coordinated action to reduce disaster risks within their control to limit adverse impacts on communities." [25]

Shared-responsibility is not mentioned by name in the TDRS, The strategy notes that the TDRS aligns with the SFDRR and NFDRR which reflect the common principles of "shared and defined responsibilities". [26]

Each document also quotes the same United Nations definition of resilience:

"The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions." [24]

Despite its elevation to prominence in Australian disaster management discourses, shared-responsibility is minimally and vaguely represented in policies, signalling that Australian governments are content to follow what it being articulated at an international level. Within the Oceania region, the concept of shared-responsibility may be viewed as outdated concept as no reference to this term can be identified in the 2019 New Zealand National Disaster Resilience Strategy [27]. Similarly, in Australian disaster polices such as the NFDRR and the TDRS, there is a reluctance to use the term, and when it is, it is sparingly adopted and left largely unexplained.

Claiming that shared-responsibility is a partially articulated social contract due to an incomplete normalisation process supports a number of further criticisms which have been levelled against resilience. Resilience has been accused of facilitating a shift in which governments encumber individuals and social institutions with responsibilities which are better addressed at a governmental level [28]. Neoliberalism has also been linked with resilience and disaster management insofar as that perturbations and disasters legitimise the use of 'state of emergencies' where action and choice are framed in the name of necessity and urgency [29]. In addition, as a narrative, it lacks clarity [30] which can threaten the concepts contribution in efforts to build resilience with no clear direction on how it is to be achieved [31]. Furthermore, it may also be deemed not 'fit-for-purpose' in a world which is increasingly characterised by complex socio-political-ecological issues such as global warming and climate change [32,33]. A charge further supported by claims that successful Disaster Risk Reduction is hampered by a poor science-policy interface [34]. It also serves to compound achieving priority one of the SFDRR insofar as fragmentation between who is accountable for distributing responsibility for risk management between governments and stakeholders within Disaster Risk Reduction and climate change strategies [35]. Engagement with the private sector is also an area where conflict over responsibility arises. Subsequently, the private sector not only holds the potential to help or hinder future impacts from disasters, but they are also required in achieving priority 4 of the SFDRR [36]. A consequence of this ambiguity is that citizens become unclear as to who does what and when [37], or as Eiser et al. (2012) identify, knowing the risk, and knowing how to respond to the risk, are not necessarily the same [38]. Nollkaemper (2018) identifies that the problem arising from shared-responsibility is that it can be difficult not only for outsiders, but also for insiders to understand whom responsibility can be ascribed to, should something go wrong. The more diffused the group, the more difficult it becomes as responsibility is scattered among different groups, individual responsibility becomes more diminished in turn [39]. As shared-responsibility is identified as a necessary element in engendering resilience in Australia, it adds to recent criticisms levelled at both resilience and sustainability in that it has become, or is becoming, an 'empty signifier' [40] insofar as the term could mean everything to everyone. Consequently, this contributes further towards confusion regarding the streamlining of rules, regulations, aspirations, and processes.

A reason for these criticisms is that shared-responsibility as a concept is being applied biopoliticaly in disaster management systems in Australia. Simultaneously, the normalisation (or homogenisation) of the rules, norms, and goals which underpin it, are only partially completed. The result is a partially articulated social contract and disempowered communities.

3. Methods

The methodology adopted in this article involves word frequency analysis based around the concept of shared-responsibility that was identified in one international and two Australian disaster management policies.

3.1. Policies

The disaster focussed policies selected for this study are the SFDRR, the NFDRR, and the TDRS. These three documents were chosen to illustrate the normalisation of shared-responsibility and the terms, concepts, rules, and goals, which permeates from the international level, through the national level in Australia, before finally being adopted by the state level in Tasmania. The Australian National Strategy for Disaster Resilience is excluded because it predates the release of the SFDRR and is well represented in both the NFDRR and TDRS.

3.1.1. SFDRR

The SFDRR is the successor framework for the 2005 Hyogo Framework for Action. The SFDRR is intended to apply to small and large scale, frequent and infrequent, sudden and slow-onset disasters. It aims to 'guide the multi-hazard management of disaster risk in development at all levels as well as within and across all sectors' [1]. The SFDRR illustrates that the normative process began at the international level and has diffused downwards to the national and state level. It reflects a global consensus on not only reducing the risks posed by disasters, but also the manner in how they are to be addressed.

3.1.2. NFDRR

The *NFDRR* translates the first three SFDRR priorities into action for the Australian context. It is intended to guide national, whole-of-society efforts to reduce disaster risk with the aim of minimizing loss and suffering caused by disasters. As such, shared-responsibility is a key guiding principle in the NFDRR.

3.1.3. TDRS

The TDRS aligns with the SFDRR and related national frameworks such as the Australian National Strategy for Disaster Resilience and the NFDRR. As such, the document follows common disaster resilience strategies and uses terminology such as shared and defined responsibilities.

3.2. Taxonomy of shared responsibility

Lukasiewicz et al. (2017) provide a comprehensive taxonomy of what constitutes shared-responsibility, as well as the obligations for governments, individuals, and the collective action required to attain these goals in an Australian setting. This taxonomy, when coupled with their list of obligations, illustrates how shared-responsibility can support a biopolitical regime used to control and steer a population. The specific responsibilities of Australian government and individuals used in this paper were identified from this taxonomy. The responsibilities of government pertain to 'distributing obligations' and the responsibilities of individuals relate to 'accepting obligations'. Table 1 provides some examples of the responsibilities of government and individuals as articulated by Lukasiewicz et al. (2017) and the key words used for the data analysis in this paper. Table 2 provides the word frequency of government and individual responsibilities.

3.3. Analysis

To aide in the analysis of the policies we used the computer-assisted qualitative data analysis software, NVivo. The first step was to calculate the frequency of occurrences across the assigned categories of responsibilities. Word frequency is advantageous as it identifies patterns more easily, can verify a hypothesis, maintains analytic integrity and rigour, and decreases researcher bias regarding overweighting [41]. Importantly, NVivo allowed us to use the word frequency option using words with stemmed variants (e.g. coordinate, coordinated, coordinating, coordination). A word frequency was performed for each of the key words identified from Lukasiewicz et al.'s (2017) taxonomy (Table 1) for each individual policy and then collectively across all three policies. To provide additional context to the word frequency, NVivo was used to create 'words trees'. Word trees allowed the visual display of the frequently appearing words in the context of how they were referenced in the policies. This confirmed applicability of the key words used in the analysis (Figs. 1 and 2).

4. Findings

In Australia, the National Strategy for Disaster Resilience (2011) can be seen as a part of the early development in the reorganisation regarding how disasters are addressed. The SFDRR advanced disaster risk reduction and also the shared-responsibility discourse to the international agenda in how disasters are managed. However, this did not translate into a deeper articulation of what shared-responsibility contained. The SFDRR highlighted shared-responsibility as its second guiding principle in disaster risk reduction. Nevertheless, aside from noting that there are 'roles and responsibilities for national governments and relevant stakeholders' [1], there is no further elaboration as to what this entails. The NFDRR, which represents Australia's implementation of the SFDRR, contains the same articulation of shared-responsibility, highlighting again that it is unequally shared in disaster management [42]. Shared-responsibility is touted as a guiding principle in the document but further elaboration as to what this involves is not included. The TDRS aligns with both the SFDRR and the NFDRR. The strategy aligns with national and international standards and practices within contemporary Tasmanian disaster management structures. Shared-responsibility is alluded to briefly insofar as that the SFDRR and NFDRR reflect common principles of disaster resilience; including shared roles and responsibilities. Simply put, permeating from the international level down is a clear-cut observation that shared-responsibility is important in disaster resilience and risk reduction measures. However, how it is to be achieved, what it involves, the rules, standards, norms, and systems which support it are left absent in these documents.

The findings identified that distributing obligations entail the responsibilities of government to educate, plan, support, clarify, coordinate, and help citizens. In some cases there is a linear lowering of emphasis as the education of citizens is exhorted at an international level, weighted at 0.29% before dropping to 0.19% in the NFDRR, and then to 0.09% in the TDRS. Other government obligations rise and fall depending on the document.

Table 1
Responsibilities of government and individuals.

Entity	Obligation	Example of a possible responsibilities provided by Lukasiewicz et al (2017)	Key words used in analysis
Government	Distribution	Pragmatically helping communities to recover & adapt to next disaster	(Public) Educating
		Strategic planning to minimise disaster risk	(Strategic) Planning
		Supporting individuals & communities to prepare for disasters	Support
		Clarification of responsibilities to enable a whole-of- government approach to disasters	Clarifying
		Coordination of human & physical resources	Coordination
		Pragmatically helping communities to recover & adapt to next disaster	Helping
Individual	Acceptance	Understanding risks and adequately preparing for them	Understanding (risk)
		Preparing a personal disaster (fire/flood) plan within the household	Preparation
		Assuming responsibility for vulnerable household members	Responsibility
		Acting on advice received from government and other community sources	Acting (on advice)
		Complying with specific legal obligations of homeowners & renters to maintain a property	Compliance
		Implementing own fire/flood plan	Implementation
		Following emergency services' directions during a disaster	Following (direction)

Table 2
Word frequency of government and individual responsibilities.

Obligation	Responsibilities	Individual policies									Collectively		
		SFDRR			NFDRR			TDRS					
		Stemmed words	Count	Weighted %	Stemmed words	Count	Weighted %	Stemmed words	Count	Weighted %	Stemmed words	Count	Weighted %
Distributing (governments)	Educating	education, educational	36	0.29	education	9	0.19	educational	2	0.09	education, educational	47	0.24
	Planning	plan, planning, plans	55	0.45	plan, planned, planning	20	0.43	plan, planning, plans	30	1.34	plan, planned, planning, plans	105	0.55
	Support	support, supported, supporting, supportive	75	0.61	support, supported, supporting, supports	19	0.41	support, supported, supporting,	27	1.20	support, supported, supporting, supportive, supports	121	0.63
	Clarifying	n/a	0	0.00	clarify	2	0.04	clarify	2	0.09	clarify	4	0.02
	Coordination	coordinate, coordinated, coordinating, coordination	38	0.31	coordinated, coordination	5	0.11	coordination	2	0.09	coordinate, coordinated, coordinating, coordination	45	0.23
	Helping	help, helps	3	0.02	help	4	0.09	help, helps	10	0.45	help, helps	17	0.09
Accepting (individuals)	Understanding	understand, understanding	17	0.14	understand, understanding	22	0.47	understand, understanding, understands	12	0.53	understand, understanding, understands	51	0.27
	Preparation	prepare, prepared, preparing, preparedness	35	0.29	prepare, preparedness	6	0.13	preparation, prepare, prepared, preparing, preparedness	28	1.25	preparation, prepare, prepared, preparing, preparedness	69	0.36
	(Accept) Responsibility	response, responsibilities, responsibility, responsible	73	0.59	response, responsibilities, responsibility, responsible	23	0.49	response, responses, responsibilities,	11	0.49	response, responses, responsibilities, responsibility, responsible	107	0.56
	Acting (on advice)	n/a	0	0.00	act, acted, acting	5	0.11	act, acting	6	0.27	act, acted, acting	11	0.06
	Compliance	compliance	2	0.02	compliance	2	0.04	n/a	0	0.00	compliance	4	0.02
	Implementation	implement, implementation, implementing	86	0.70	implement, implementation, implemented, implementing	14	0.30	n/a	0	0.00	implement, implementation, implemented, implementing	100	0.52
	Following	follow, following	22	0.18	following	2	0.04	following	1	0.04	follow, following	25	0.13

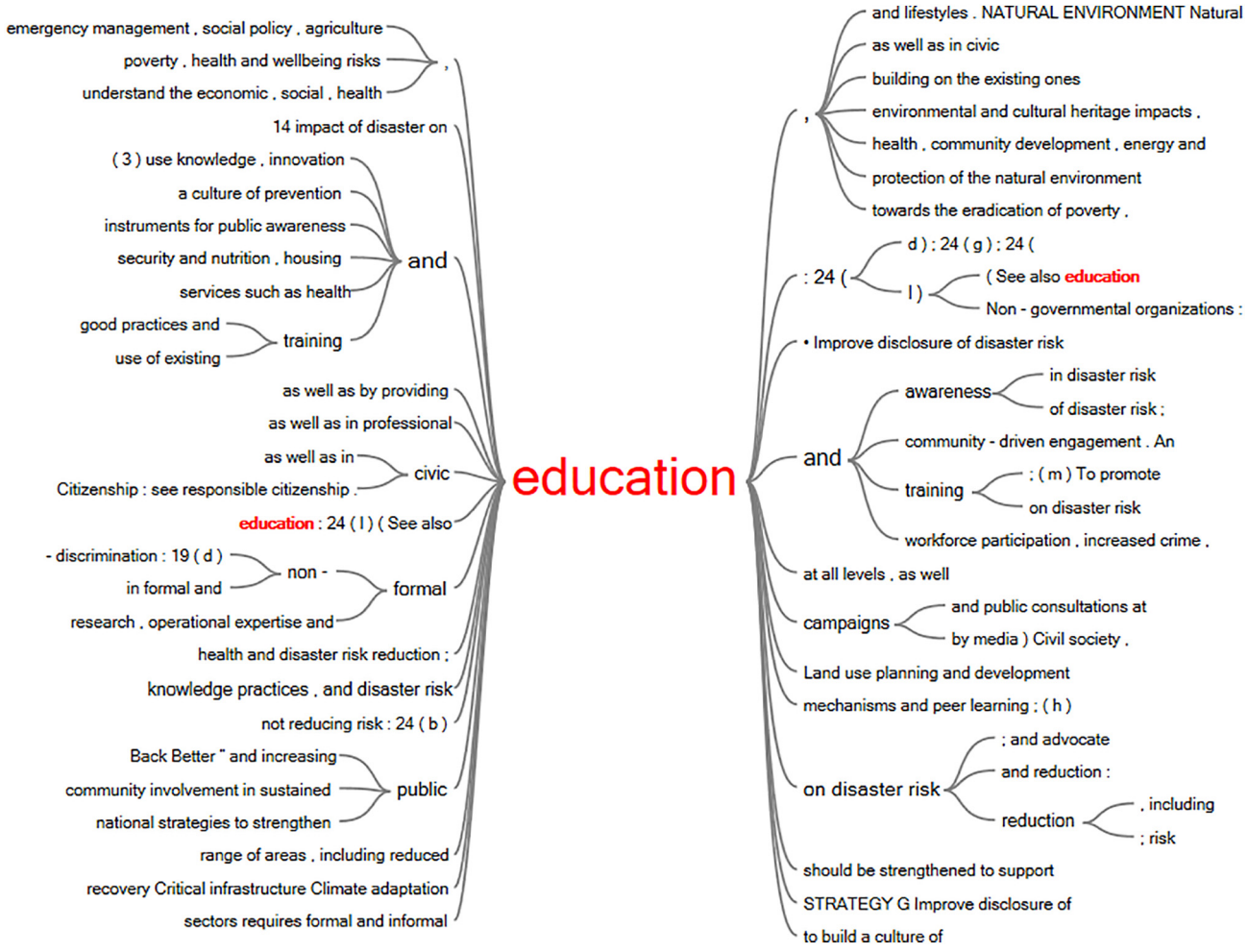

Fig. 1. Example of a word tree for the term 'education'.

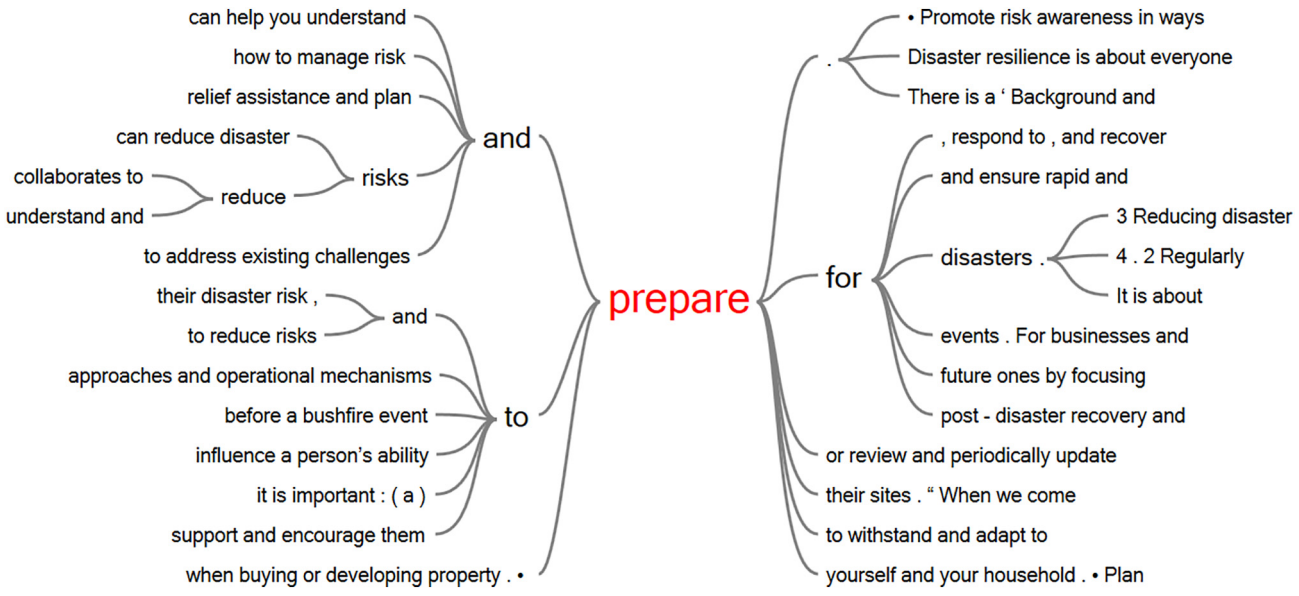

Fig. 2. Example of a word tree for the term "prepare'.

Planning is weighted in the SFDRR at 0.45% and the NFDRR at 0.43% before more than tripling to 1.34% in the TDRS. The same can be observed in the occurrence of the term support that is 0.61% in the SFDRR, 0.41% in NFDRR, and then tripling to 1.20% in the TDRS. The only example of conformity across all documents examined was that of the term clarification. This word was not mentioned in the SFDRR and mentioned only twice in the NFDRR and TDRS respectively. The occurrence of the obligation to coordinate (and its associated word stems) is reflected at 0.31% in the SFDRR, dropping to 0.11% in the NFDRR and then to 0.09% in the TDRS. The term help is barely mentioned in both the SFDRR and NFDRR (0.02% and 0.09%) before jumping to 0.45% in the TDRS.

The question at this juncture is what does this mean? For government obligations, what the findings illustrate is that new norms and rules in how governments perceive their obligations are weighted differently depending on what level and document they appear in. Governments seem to be willing to educate, plan, and support in varying levels, however, when it comes to clarifying, coordinating, and helping their citizens, they seem less inclined to assume the responsibility.

On accepting (individual) obligations, the same inconsistency and confusion can be seen across the Australian policies examined in this paper. Individual obligations, and their word stems: of understanding; preparation; (accept) responsibility; acting (on advice); implementation; and following; were employed to highlight individual obligations within disaster management. Much like the government obligations, there are inconsistencies and confusion surrounding what individuals are expected to know and do. Depending on the document, individuals can be expected to prepare, that is reflected by 0.29% in the SFDRR, 0.13% in the NFDRR, and then 1.25% in the TDRS. Individuals are consistently asked to accept their responsibilities as identified by 0.59% in the SFDRR, and 0.40% in both the NFDRR and TDRS. However, acting on advice provided is negligent in the SFDRR and mentioned only five and six times in the SFDRR and TDRS. Compliance and its associated stem words are mentioned twice in both the SFDRR and the NFDRR, and not at all in the TDRS. Implementation is mentioned heavily in the SFDRR (0.70%), moderately in the NFDRR (0.30%) and not at all in the TDRS, correspondingly, the term following is mentioned at 0.18% in the SFDRR, before being mentioned twice in the NFDRR and once in the TDRS. Based on these findings it could be gleaned that an individual is expected to accept that they have responsibilities and prepare, but they are under no obligation to act on advice, nor comply, nor follow what is exhorted. Individuals are also, to varying degrees, obligated to implement their plans, or in the case of Tasmania, not at obligated at all.

5. Discussion

The findings from this paper articulate the mismatch of expected disaster obligations and responsibilities that currently exist between governments and citizens in Australia. As observed by McLennan and Handmer (2014), shared-responsibility represents a partially articulated social contract between governments and their citizens. The taxonomy of obligations developed from Lukasiewicz et al. (2017) combined with Foucauldian theory illustrates that this is in part because of an incomplete normalisation process followed by the use of shared-responsibility as part of a biopolitical regime. Since the concept of shared-responsibility and resilience theory are no longer in their infancy, both concepts have been a part of Australian disaster management discourses for more than a decade [43], this represents a failure of governments to properly prepare citizens for their expected duties in the preparation for, response to, and recovery from, disasters.

Combining the taxonomy of obligations with targeted word searches in three significant disaster policies, highlights how considerable the incomplete process of normalisation is, and the confusion which emerges from its biopolitical application in contemporary Australia.

When table two is viewed in its entirety an alarming pattern is evident. Governments in Australia expect individuals to accept that they have responsibilities and to act accordingly. However, when it comes to helping, clarifying, or coordinating them, governments have indicated that they are prepared to educate, or provide the means and support for individuals to do so themselves. Individuals then, are to prepare and implement according to government exhortations, but are under no obligation to comply with, act on or follow advice. This is an observation consistent with resilience being used as a means to responsibilise individuals [44], as well as the difficulties in assigning and formalising responsibilities in Australian legal and governance structures [23]. Furthermore, shared-responsibility could no longer be 'fit-for-purpose' in a world which is increasingly characterised by complex socio-political-ecological issues such as global warming and climate change. As identified earlier, an example of how shared-responsibility may be viewed as an already out-dated concept can be found in the 2019 New Zealand National Disaster Resilience Strategy where there is no mention of shared-responsibility [27]. This is exemplified by the reluctance to use the term in both the NFDRR and TDRS, and when it is, it is sparingly done and left largely unexplained.

An explanation for this is that shared-responsibility as a concept is being employed in a disaster management biopolitical regime in Australia, while the normalisation (or homogenisation) or rules, norms, and goals which underpin it is only partially completed itself. This results in a partially articulated social contract which enhances the disempowerment of Australian communities.

6. Limitations

The main limitation with this paper is that it is Australian-centric and only explores the disaster policy of one Australian state. However, the authors never set out on a journey to generalize the findings. The aim of the article was to highlight that an incomplete process of normalisation is responsible for claims that shared-responsibility is not only a partially articulated social contract, but that this incomplete process also explains how communities are further disempowered.

7. Conclusions

Preparing for and responding to disasters is a complex task and devolving policy can be an attractive option. Shared-responsibility has become a ubiquitous within disaster management discourses. Lukasiewicz et al. (2017) have highlighted the obligations for both Australian citizens and governments in shared-responsibility. By viewing this term as partially articulated and the result of an incomplete normalisation process, once their obligations are applied to central policy framework documents it can be seen that this results in a biopolitical regime marred by vagueness and ambiguity. Using central policy documents such as the SFDRR, the NFDRR, and the recently released TDRS to illustrate how normalisation is devolved from the international level down, highlights this problem further.

This article sought to uncover government and individual responsibilities in Australian disaster management policies. In analysing the SFDRR, the NFDRR, and the TDRS, what can be seen is that governments in Australia expect individuals to accept that they have responsibilities and to act accordingly. However, when it comes to helping, clarifying, or coordinating them, governments have indicated that they are prepared to educate, or provide the means and support for individuals to do so themselves. Individuals then, are to prepare and implement according to government exhortations, but are under no obligation to comply with, act on or follow advice. This offers an explanation as to why shared-responsibility has been characterised as not only a partially articulated social contract but can also serve to disempower communities.

An avenue for future research would be to investigate whether this occurs in other Australian states and what policy challenges occur inter-jurisdictionally. This aligns to the question of whether resilience and shared-responsibility are being used as scapegoats to encumber individuals and communities with responsibility within disaster management. Given the complex nature of disaster risk reduction policy, the implications of climatic instability wrought from a warming climate, and the continuing

evolution of disaster management as a field, closer scrutiny on macro and *meso* level policy is required. It is only by analysing documents such as those analysed in this paper that the process of normalisation can be viewed in separate jurisdictions. Doing so will allow for inconsistencies to be identified and for a more streamlined understanding of roles and responsibilities for all involved.

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